

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:

RYUICHIRO KURANE ET AL

: EXAMINER: FREDMAN

SERIAL NO.: 09/556,127

FILED: APRIL 20, 2000

: GROUP ART UNIT: 1655

FOR: METHOD FOR DETERMINING

A CONCENTRATION OF TARGET NUCLEIC ACID MOLECULES, NUCLEIC ACID PROBES FOR THE METHOD, AND METHOD FOR ANALYZING DATA OBTAINED BY THE METHOD :



## REQUEST FOR RECONSIDERATION

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

SIR:

In response to the Advisory Action dated January 03, 2002 (Paper No. 16) and concurrent with the Request for Continued Examination filed herewith, Applicants request reconsideration in light of the following remarks.

## **REMARKS**

Applicants request entry of the claim amendments filed in Applicants' After Final Amendment filed on December 21, 2001.

Claims 1-45, 47-58, and 60-71 are active in the present application.

The Examiner contends that while unexpected results have been presented for the Bodipy-FL label, recited in the present claims, the data submitted in the Rule 132 Declaration

of Mr. Kurata was not commensurate in scope with the claims (page 3 of the Advisory Action). The Examiner states that "this issue could be addressed either by a declaration showing data for at least one additional Bodipy label or by a declaration from an expert, such as the inventor, which stated that all Bodipy labels would be expected to have this result based upon some particular feature." (Page 3 of the Advisory Action).

Accordingly, Applicants submit herewith a second Rule 132 Declaration executed by Mr. Kurata, which provides data demonstrating "that all the probes labeled with the fluorescent dyes listed in the claims yield consistent quenching rates . . ." (Page 4 of the Kurata Declaration appended hereto). For example, in Table 1, which Applicants have reproduced below, the consistent decrease in fluorescent intensity is shown in the last column comparing the percentage (%) decrease in each of Experiments 1 through 5.

Table 1. Experimental data for the hybridization results

Fluorescent dyes	Excitation (nm)	Emission (nm)	Decrease in fluorescent intensity (%) Experimental No.					
,		·						
		·						
		·	1	2	3	4	5	the mean
BODIPY FL	500	520	91	93	93	92	92	92
BODIPY FL/CL3	500	520	94	96	95	95	95	95
6-joe	515	550	66	67	67	67	66	67
TMR	545	580	90	89	89	88	90	89
Alexa 488	480	520	55	56	53	54	54	54
Alexa 532	515	545	38	40	39	41	39	39

Sequences for Table 1.

Probe: 5' CCCCCCCCC CCTTTTT 3'

Target nucleic acid: 5' AAAAAGGGGG GGGGGGG 3'

Accordingly, upon entry of Applicants' After Final Amendments and the data contained in Mr. Kurata's Rule 132 Declaration appended hereto, Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b) over Morrison et al or Wittwer et al and under 35 U.S.C. § 103(a) over Wittwer et al in view of Metelev et al, Hogan et al, Tyagi et al, Donovan et al, and/or Heller et al.

Applicants submit that the present application is now in a condition for allowance.

Early notice of such allowance is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Norman F. Oblon Attorney of Record Registration No. 24,618

Daniel J. Pereira, Ph.D. Registration No. 45,518

22850

(703) 413-3000 Fax #: (703) 413-2220 NFO/DJP

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